

**THAT WHICH IS CLAIMED:**

1. A method for completing the manufacturing phases of an IC card performing a final and secure personalization phase of a semi finished IC card (1) including a non-volatile memory portion (4) wherein personalization data and information are stored in secret allocations, and comprising at least the following steps:

- storing an algorithm inside the non-volatile memory portion (4) processing data as an finite-state machine (10);
- enabling an entity different from the card manufacturer to access the algorithm for storing all necessary data and information required by the personalization phase, according to a designated application field of the IC card
- performing a security authentication step before enabling the algorithm to receive the data and information; and characterized by:
  - enabling the algorithm to receive the data and information;
  - storing the data and information in secret memory locations of the non-volatile memory portion (4) according to a predetermined data structure and an access procedure hidden to the entity;
  - newly allowing the enabling phase of the algorithm in case of a wrong enabled personalization phase.

2. Method according to claim 1 wherein different personalization commands corresponding to different memory location where to store data are included in the non-volatile memory portion (4).

3. Method according to claim 1 wherein the finite-state machine (10) processes the data and information according to an event triggered by a command sent to a microprocessor (2) of the IC card.

4. Method according to claim 3 wherein the transitions from one state to another state of the finite-state machine (10) are activated by the following predetermined events:

- Personalization Process Enabling;
- Security Authentication;
- Data Sending; and
- Personalization Completion.

5. Method according to claim 4 wherein each of the event is triggered by a specific set of commands sent to the smart card; the commands being:

- ENABLEPERSO
- VERIFYPERSO CODE
- PUTPERSO DATA
- LOCKPERSO

6. Method according to claim 5 wherein the ENABLE PERSO command allows the transition on a READY state wherein the IC card is enabled to receive the commands specified for the data personalization.

7. Method according to claim 6 wherein the READY state is a transition state and only the VERIFY PERSO CODE command is accepted.

8. Integrated Circuit card including means for providing a specific personalization of the card according to claim 1.